NATIONAL ORGANIC STANDARDS BOARD FINAL RECOMMENDATION ADDENDUM NUMBER 14

THE USE OF NATURAL FLAVORS IN ORGANIC FOODS

Date adopted: October 31, 1995 Location: Austin, Texas

Introduction:

The Committee has debated the issue of the use of natural flavors as ingredients in organic foods. The focus of the debate has been whether natural flavors, with certain constraints, are appropriate for use in "organic foods" (95%-100% organic ingredients) or whether natural flavors should be restricted to use in foods "made with organic ingredients" (50%-95% organic ingredients) only.

Natural flavors are materials which are comprised of flavor compounds derived from natural (non-synthetic) bases (typically botanicals such as herbs, spices, fruits or compounds derived from fermentation), a carrier (ethanol, propylene glycol, etc.), and agents which help preserve the natural flavors (glycerin, acetic acid, etc.). The natural constituents included in the natural flavor are extracted using a number of natural and synthetic solvents. The solvents may be alcohols, ethyl acetate, hexane or acetone and are chosen based on their physical and chemical properties and their ability to extract the desired natural constituent. The solvents are removed by evaporation with the final flavor compounds including trace amounts of the solvents (typically <10ppm). The number of flavor compounds comprising natural flavors vary, but may number up to 100 or more.

Natural flavors are used in very small amounts (approximately .05-.40%) to boost the flavor profile in products which, because of functional or economic necessity, require less than optimal amount of foodstuff necessary to give the finished products the required flavor profile. They are widely used in dairy products, baked goods, and juice products, as well as in other foods.

Recommendation:

Upon implementation, all manufacturers will be required to have certification from the producers of the natural flavors that,

For "organic foods" (95%-100% organic ingredients):

- 1) All of the flavor constituents used in the natural flavor are from natural sources and have not been chemically modified in a way which makes them different than their natural chemical state.
- 2) The natural flavor has not been produced using any synthetic solvent and carrier systems or any artificial preservatives.

For "foods made with organic ingredients" (50%-95% organic ingredients):

- 1) All of the flavor constituents used in the natural flavor are from natural sources and have not been chemically modified in a way which makes them different than their natural chemical state.
- 2) The natural flavor does not contain propylene glycol, any artificial preservatives, and is not extracted with hexane.

Additionally, manufacturers shall provide written documentation in their Organic Handling Plan showing efforts made toward the ultimate production of an organic natural flavor as listed in the stepwise progression below:

Natural flavor constituents and non-synthetic carrier base and preservative agents (ex. grain ethanol, non-synthetic glycerin and non-synthetic acetic acid).

Organic flavor constituents, organic carrier base, and organic preservative agents.

Organic flavor constituents extracted using organically produced solvents, organic carrier base, and organic preservative agents.